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## REMARKS

## Status Summary

In this Amendment, no claims are added and no claims are canceled. Therefore, upon entry of this Amendment, claims 1-57 will remain pending.

# Telephone Examiner Interview Summary

Applicants greatly appreciate the Telephone Examiner Interview granted to Applicants' representative, Gregory A. Hunt, on January 17, 2006. In the Telephone Examiner Interview, proposed amendments to claims 1, 20, and 39 were discussed. In addition, the difference between a signaling message routing node, which routes messages between other nodes, and signaling endpoints, such as MSCs or SCPs, which originate and terminate messages, was discussed.

At the conclusion of the Telephone Interview, Applicants agreed to file a 116 Amendment incorporating language in the independent claims to more specifically define a signaling message routing node. The amendments proposed above are consistent with the discussion in the Telephone Interview. In addition, the claims have been amended to recite that the signal transfer point routes mobile subscriber location request and call setup signaling messages between nodes in the network. Support for the additional amendment to claims 1, 20, and 39 is found, for example, in Figures 1 and 4 of the present application where routing node 100 routes SRI and IAM messages, which are examples of mobile subscriber routing information request and call setup signaling messages, respectively.

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As discussed in the Telephone Examiner Interview of January 17, 2006, the Examiner is invited to call Applicants' attorney, Gregory A. Hunt, at (919) 493-8000 to conduct a subsequent telephone interview to resolve any outstanding issues.

## Claim Rejections Under 35 U.S.C. § 102

Claims 1, 5, 12-14, 17-20, 24-27, 29, 35, 37-39, 43, 50, 51, and 54-57 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,161,012 to Fenton et al. (hereinafter, "Fenton").

Independent claims 1, 20, and 39 respectively recite a method, a signaling message routing node, and a computer program product where the signaling message routing node comprises a signal transfer point (STP) for routing call setup and mobile subscriber routing information request messages between other nodes in a network. The signaling message routing node intercepts call signaling messages for calls directed to a mobile dialing group, determines a called party address based on a mobile dialing code in the signaling message, replaces the mobile dialing code, and routes the mobile call signaling message to its destination. A method, a system, or a computer program product where the signaling message routing node includes an STP and routes mobile call signaling messages between other nodes in the network can be contrasted with the disclosure of Fenton where an MSC recognizes calls directed to short codes, suspends call processing, and consults a VLR in order to process the messages. For example, Fenton states:

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Prior to routing the call, the mobile switching center **MSC1** defers the calling data to the visitor location register **VLR1** where the identity of the dialing station **MS1** is authenticated by use of the IMSI and the secret key. The short code in the calling data is then compared with the permitted list of short codes to determine whether the user is permitted to make the call. (See column 4, lines 50-56 of <u>Fenton.</u>)

The above-quoted passage from <u>Fenton</u> indicates that the MSC consults the VLR to determine whether a call to a short code is allowed. An MSC is not a signaling message routing node because it does not route signaling messages. MSC1 originates and terminates signaling messages. Similarly, a VLR as described in <u>Fenton</u> is a database that responds to queries from an MSC and originates messages that are sent to HLR. Accordingly, because independent claims 1, 20, and 39 recite a signaling message routing node comprising a signal transfer point that routes call setup signaling and mobile subscriber routing information request messages between nodes in a network, it is respectfully submitted that the rejection of the claims as anticipated by Fenton should be withdrawn.

#### Claim Rejections under 35 U.S.C. § 103

Claims 11, 16, 49, and 53 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fenton. This rejection is respectfully traversed.

Claims 11 and 16 depend from claim 1. Claims 49 and 53 depend from claim 39.

As stated above with regard to the rejection of claims 1 and 39 as anticipated by Fenton, Fenton falls to teach a signaling message routing node comprising a signal transfer point that routes call setup signaling messages and mobile subscriber location request messages between nodes in a network and that also translates mobile dialing

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codes as claimed. Accordingly, for the same reasons stated above with regard to the rejection of claims 1 and 39, it is respectfully submitted that the rejection of claims 11, 16, 49, and 53 as unpatentable over Fenton should be withdrawn.

Moreover, as stated in Applicants' response to the previous Official Action, the fact that the Official Action takes official notice that an STP is used to route a signaling message does not render the claimed invention obvious. As stated in Applicants' response to the previous Official Action, adding an STP to the disclosure of Fenton would merely provide a node that routes messages between the MSC and the VLR. There is absolutely no teaching or suggestion in Fenton that such an STP would be used to process messages with mobile dialing codes as claimed. In contrast, as stated above, Fenton teaches that the MSC and the VLR process the mobile dialing codes. Thus, for this additional reason, it is respectfully submitted that the rejection of the claims as unpatentable over Fenton should be withdrawn.

As further evidence that the rejection of the claims as unpatentable over Fenton should be withdrawn, Applicants direct the Examiner's attention to the following quote form page 10 of the current Official Action:

"In the SS7 network, the distinction is made between a signaling transfer point (STP) which only performs MTP message routing functionalities and a signaling endpoint (SEP) which uses the MTP to communicate with switches..." SEPs e.g. telecomm [retrieved] from http://en.wikipedia.org/wiki/message transfer part].

The above-quoted passage highlights the difference between a signal transfer point and a signaling endpoint. The signal transfer point claimed in independent claims 1, 20, and 39 performs message routing. In addition, these claims recite that the signal transfer

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point processes messages including short codes. In contrast, a signaling endpoint is a node, such as an MSC or a VLR as taught by Fenton, that uses MTP only to communicate with other nodes, such as switches. Accordingly, it is respectfully submitted that a signaling endpoint, such as an MSC, HLR, or a VLR, as disclosed in Fenton, is not a signal transfer point as claimed. Accordingly, for this additional reason, the rejection of the claims as unpatentable over Fenton should be withdrawn.

Claims 2-4 and 40-42 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fenton in view of U.S. Patent Application Publication No. US 2002/0115441 to Alonso et al. (hereinafter, "Alonso"). This rejection is respectfully traversed.

Claims 2-4 depend from claim 1. Claims 40-42 depend from claim 39. As stated above with regard to the rejection of claims 1 and 39 based on Fenton, Fenton fails to teach or suggest a signaling message routing node that performs triggeriess mobile group dialing as claimed. Alonso likewise lacks such teaching or suggestion. As stated in Applicants' response to the previous Official Action, Alonso is directed to a gateway mobile switching center (GMSC) that presents calling subscriber number information in mobile networks. The GMSC of Alonso is a signaling endpoint, rather than a signal transfer point as claimed. In particular, the GSMC of Alonso receives IAM messages and formulates SRI messages including calling subscriber numbers. Such a node terminates and originates messages, rather than route messages. Moreover, nothing in Alonso indicates that the GMSC processes is short codes. Accordingly, it is respectfully submitted that the rejection of the claims as unpatentable over Fenton in view of Alonso should be withdrawn.

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Claims 15 and 22 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fenton in view of U.S. Patent No. 6,076,121 to Levine (hereinafter, "Levine"). This rejection is respectfully traversed.

Claim 15 depends from claim 1, and claim 52 depends from claim 39. As stated above with regard to the rejection of claims 1 and 39 based on Fenton, Fenton falls to teach or suggest a signaling message routing node comprising a signal transfer point that also processes mobile dialing codes as claimed. Levine likewise lacks such teaching or suggestion. Levine is directed to an end office switch and the service control point that allow users to dial functional property codes to reach different telephone lines. (See Abstract and Figure 2 of Levine.) As stated above, end office switches and service control points are signaling endpoints, which originate and terminate, rather than route messages. In contrast, independent claims 1 and 39 recite a signaling message routing node comprising a signal transfer point that routes call setup and mobility management signaling messages between nodes in a network. Because Fenton and Levine teach only processing performed at the signaling endpoints, it is respectfully submitted that the rejection of the claims as unpatentable over Fenton in view of Levine should be withdrawn.

Claims 21, 22, 31-34, and 36 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fenton and further in view of U.S. Patent No. 6,055,302 to Schmersel et al. (hereinafter, "Schmersel"). This rejection is respectfully traversed.

Claims 21, 22, 31-34, and 36 depend from claim 20. As stated above with regard to the rejection of claim 20 based on Fenton, Fenton fails to teach or suggest a

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signaling message routing node comprising a signal transfer point for adding call setup and mobile subscriber routing information request messages between other nodes in a network and that also translates mobile dialing codes. Schmersel likewise lacks such teaching or suggestion. Schmersel is directed to methods for processing non-call related messages at a server control point (SCP). As stated above, an SCP has a signaling endpoint which is distinct from a node that routes signaling messages as claimed. Thus, for this reason alone, the rejection of claims 21, 22, 31-34, and 36 as unpatentable over Fenton in view of Schmersel should be withdrawn.

Moreover, the Official Action indicates that Figure 9 and column 13, lines 32-42 of Schmersel disclose performing short code processing at an SS7/IP gateway. Applicants respectfully disagree. In Figure 9 and in the quotation from column 13 of Schmersel, the abbreviation "IP" stands for intelligent peripheral, rather than Internet protocol as claimed. The intelligent peripherals in Figure 9 of Schmersel are disclosed as being service relay functions (SRFs). (See column 13, line 36 of Schmersel.) According to Schmersel, an SRF provides IN services, such as DTMF digit reception, announcements, and speech recognition. (See column 9, lines 36-40 of Schmersel.) Thus, an SRF according to Schmersel is a signaling endpoint that provides services to other nodes rather, than a signaling message routing node comprising a signal transfer point as claimed. Accordingly, for this additional reason, the rejection of claims 21, 22, 31-34, and 36 as unpatentable over Fenton in view of Schmersel should be withdrawn.

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## Allowable Claims

Claims 6-10 were indicated as allowable if rewritten in independent form. Claims 6, 9, and 10 have been rewritten in independent form as suggested by the Examiner. Accordingly, claims 6-10 should now be allowed.

## CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

#### DEPOSIT ACCOUNT

Although no fee is believed to be due, the Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON, TAYLOR & HUNT, P.A.

Date: February 1, 2006

By: (1)

Registration No. 41,085

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